

IN THE CLAIMS:

1. (Currently Amended) An optical device, comprising:
 - a membrane configured to be electrically deformable and reflective and positioned over a cavity located within a substrate;
 - a transmissive spacer coupled to said substrate and located over said cavity; and
 - a lens coupled to said transmissive spacer and optically aligned with said membrane, wherein said transmissive spacer has a thickness substantially equal to a focal length of said lens.
2. (Original) The optical device as recited in Claim 1 further comprising a fiber holder coupled to said lens.
3. (Original) The optical device as recited in Claim 1 wherein said membrane is located over a first substrate having a first alignment mark and said transmissive spacer is formed from a second substrate having a second alignment mark that corresponds to said first alignment mark to provide alignment of said first substrate with said second substrate.
4. (Original) The optical device as recited in Claim 1 wherein said transmissive spacer comprises a material selected from the group consisting of:
 - silicon;
 - ceramic;
 - fused silica; and
 - infrared-transparent optical glass.

5. (Original) The optical device as recited in Claim 1 wherein said transmissive spacer forms a lumen between said lens and said membrane and wherein said lumen contains air or an inert atmosphere or wherein at least a partial vacuum exists between said lens and said membrane.

6. (Cancel without prejudice or disclaimer).

7. (Original) The optical device as recited in Claim 1 further comprising terminals on an exterior of said optical device and connected to said membrane and configured to provide an electrical current to said membrane.

8. (Currently Amended) A method of manufacturing an optical device, comprising:

positioning a membrane configured to be electrically deformable and reflective over a cavity located within a substrate;

coupling a transmissive spacer to said substrate such that said transmissive spacer is located over said cavity; and

coupling a lens to said transmissive spacer and optically aligned with said membrane,
wherein said transmissive spacer has a thickness substantially equal to a focal length of said lens.

9. (Original) The method as recited in Claim 8 wherein positioning further includes positioning a plurality of said membranes over a corresponding one of a plurality of cavities located in said substrate, and wherein coupling a transmissive spacer further includes coupling a transmissive spacer to each of said membranes, and coupling a lens includes coupling a lens to each of said transmissive spacers, and the method further includes coupling a fiber holder to each of said lenses.

10. (Original) The method as recited in Claim 8 further comprising coupling a fiber holder to said lens.

11. (Original) The method as recited in Claim 8 wherein said membrane is formed on a first substrate having a first alignment mark, and said transmissive spacer is formed from a second substrate having a second alignment mark, and wherein coupling said transmissive spacer includes coupling said second substrate to said first substrate by using said first and second alignment marks.

12: (Cancel without prejudice or disclaimer).

Claims 13-20 (canceled)